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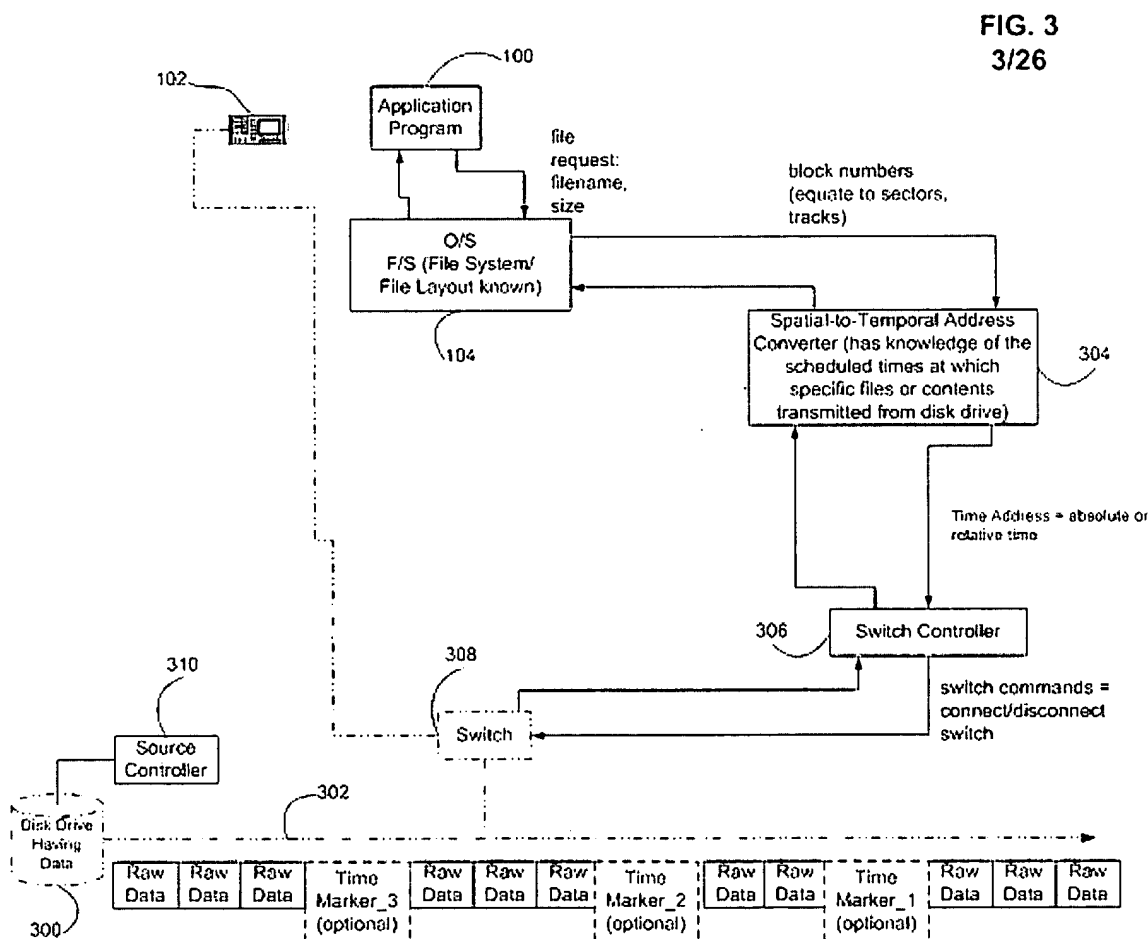
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I. STATUS OF CLAIMS

Claims 1-57 are pending; Claims 51-57 stand withdrawn from consideration by action of Examiner Savla (hereinafter "Examiner"). *Examiner's Office Action*, Summary, (20 October 2006). Claims 1-6, 12-18, 21-31, 37-43, and 46-50 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Jaeger (U.S. Patent No. 6,345,028) ("Jaeger" hereinafter). *Id.* at p. 5. Claims 7-11, 19-20, 32-36, and 44-45 stand rejected under 35 U.S.C. § 103(a) as being obvious over Jaeger in view of Ma et al. (U.S. Patent No. 5,926,649). *Id.* at p. 14.

II. DRAWING/TEXT FROM PRESENT APPLICATION

Part of the application of which the herein-rejected claims form a part entails Applicant's Figure 3, and/or supporting/related text (e.g., pp. 9-10 of Applicant's application), portions of which are reproduced immediately below (emphasis added):



With reference now to Figure 3, illustrated is a block diagram of a spatial-to-temporal address translation method and system. Disk drive 300 is shown reading data from disk drive 300 and transmitting the read data onto communications media 302 in a predetermined fashion....

Application program 100 is depicted as resident within data processing system 102. Application program 100 is illustrated as issuing a read file command to operating system 104. In response to the read file command, operating system 104 is shown as issuing read data block commands to spatial-to-temporal address converter 304.

In response to the read data block commands, spatial-to-temporal address converter 304 is depicted as converting the data block addresses into time addresses, and transmitting time addresses to switch controller 306. Spatial-to-temporal address converter 304 converts the data block commands to associated time addresses that indicate when data necessary to satisfy the read data block commands should be present at the input of switch 308. Spatial-to-temporal address converter 304 can perform the conversion efficiently because spatial-to-temporal address converter 304 has knowledge of and thus can consult the scheduled times at which disk drive 300 transmits specific content onto communications medium 302 (examples showing how address converter 304 can gain this knowledge from source controller 310 are discussed herein)....

In response to the time addresses received from spatial-to-temporal address converter 304, switch controller 306 is illustrated as issuing connect or disconnect commands to switch 308. In response to the connect and/or disconnect commands, switch 308 is shown as appropriately connecting with or disconnecting from communications medium 302. In one embodiment, when switch 308 is connected with communications medium 302, switch controller 306 receives the data obtained by switch 308.

Subsequent to receiving the data from switch 308, switch controller 306 is depicted as formulating and transmitting the data read in a format appropriate to spatial-to-temporal address converter 304. Subsequent to receiving the data from switch controller 306, spatial-to-temporal address converter 304 is illustrated as formulating and transmitting the read data in a format appropriate to operating system 104....

III. ISSUES TO BE REVIEWED

The issues in this response relate to whether the art of record establishes a *prima facie* case of the unpatentability of Applicant's Claims 1-50. For reasons set forth elsewhere herein,

Applicant respectfully asserts that the art of record does not establish a *prima facie* case of the unpatentability of any pending claim. Accordingly, Applicant respectfully requests that Examiner hold all pending Claims 1-50 allowable for at least the reasons described herein, and issue a Notice of Allowance on same.

A. Text/Drawings from the Jaeger Reference

Applicant respectfully points out that the technical material cited by Examiner at least in part entails Jaeger's Figures 1, 2, 5, and/or their supporting texts. *See, e.g., Examiner's Office Action pp. 4-14* (20 October 2006). In light of the foregoing, and as a courtesy to Examiner, Applicant first sets forth as context excerpts of Jaeger's Summary of the Present Invention section, after which Applicant reproduces Jaeger's Figures 1, 2, 5, and at least a portion of their supporting texts. Specifically, as context, Applicant points out that Jaeger's Summary of the Present Invention section states as follows:

Initially, a plurality of audio tracks are recorded on a disk drive, using technology known in the prior art, the audio tracks being recorded in digitized format in available portions of the disk drive. Thereafter, in order to maximize the number of audio tracks that can be played back simultaneously, the recorded audio data is re-ordered, as follows. Incremental temporal segments of each recorded audio track are read from the disk and assembled into a composite data frame in RAM, and the frame is recorded back onto a disk drive. Thus, for example, the first 100 ms of each audio track comprises the first incremental temporal segments, and all of these segments are recorded in a defined order in the first composite data frame. The second frame consists of the second 100 ms segments of the same audio tracks, which are recorded in the same order as in the first frame. This process is reiterated until the entire lengths of all of the audio tracks are re-ordered and recorded in such frames on the disk drive. Reiteration may be carried out R times, where R may vary from zero to any positive integer. The frames are placed on the disk in contiguous order, to the greatest extent possible, to minimize the seek time of the disk drive read/write heads. But because of physical writing limitations of disk drive architectures and/or requirements of disk drive operating systems, these frames may not always be capable of being written in contiguous order....

....

Each frame is labeled with a time stamp that encodes the ordered position of the frame among all the composite data frames. The time stamp distinguishes the location of the starting point of each frame or sub-section on the disk drive data

tracks. In addition, a registry of all the start times is created and stored in memory, as well as on backup storage media. The disk drive operating program is capable of reading the start time registry and directing the read/write head to the start of any frame, and also to read out the frames in an ordered manner. The disk drive reads each composite frame as a data stream that is loaded into RAM, where it is read out, disassembled, and routed to separate outputs as the plurality of audio tracks that were initially recorded. Initially, the first two frames are loaded into RAM. After the first frame is read out as audio tracks, it is erased while or after the third frame is loaded into RAM, and so on. In this manner the individual audio tracks are reassembled from the track segments that comprise each frame, and playback of all the audio tracks appears to be continuous and simultaneous. However, the amount of RAM required for this process is only a small fraction of the RAM required to read out and store all of the audio tracks in complete form prior to playback, as is required in prior art devices.

See Summary of the Present Invention, Jaeger Col. 2 lines 46-67; Col. 3, lines 1-3; and lines 29-51 (emphasis added).

With the foregoing excerpts drawn from Jaeger's Summary of the Present Invention sections, Applicant will now respectfully set forth Jaeger's Figures 1, 2, 5, and at least a portion of their supporting text immediately following:

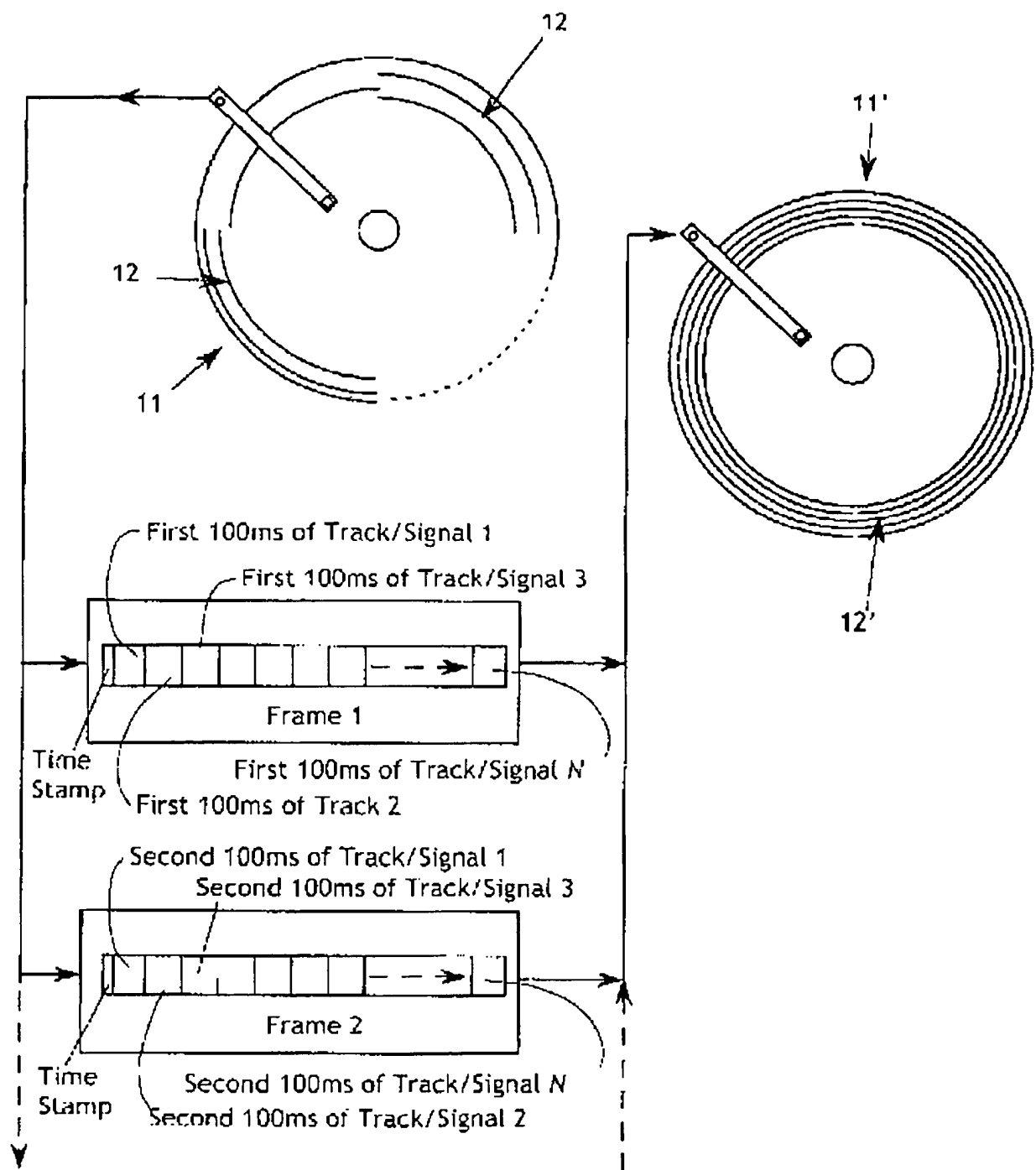


FIG. 1

With regard to FIG. 1, a disk drive 11 is used initially to record a large plurality of audio tracks/signals, using devices known in the prior art to digitize the audio tracks and record the digitized data on the drive 11. Typically, each audio track/signal is recorded on one or more sectors of predefined disk tracks 12. The

recording process generally proceeds by available empty sectors on the disk tracks being recorded on a first-available basis, whereby the audio tracks/signals may be placed on the disk 11 in a disordered manner. This lack of contiguity of the recorded tracks/signals can limit the disk's ability to read out and play back a large plurality of tracks/signals simultaneously.

...

To overcome this drawback in the playback process, the invention processes the recorded audio tracks by re-ordering the audio data and recording new composite data frames onto a disk drive. First, incremental temporal segments of each recorded audio track are read from the disk 11 in a predetermined numerical order, e.g., starting with track 1 and ending with the last recorded track (e.g., track N). The temporal segments are all of the same short duration, such as 100 ms, although other durations may be used. In the example of FIG. 1, the first 100 ms segments of tracks 1-N are read in a predetermined order from the disk 11 and placed in a RAM buffer in the predetermined order, where they are assembled into composite data frame 1. Frame 1 is labeled with a time stamp which indicates the starting point of the frame and also the number of the frame. Likewise, the second 100 ms segments of tracks 1-N are then read from the disk drive 11 and placed in the RAM buffer as data frame 2, which is also labeled with its respective time stamp....

Thereafter, or simultaneously, the composite data frames are recorded onto a disk drive, indicated as reference numeral 11', which may be any disk drive or equivalent recording media. In either case, the frames are placed onto the disk 11' in as contiguous order as practically possible on disk tracks 12', as indicated in FIG. 1. The frames are recorded as contiguously as possible to minimize the seek time of the read/write head of the disk drive during read out, as described later....

At the same time, a registry of all the time stamps of all the frames is created and stored in RAM, and also on the disk 11 or 11', or other storage medium. The registry enables the disk drive operating program to direct the read/write head to the start of any frame, and also to read out the frames in a predetermined order.

See Detailed Description, Jaeger Col. 5 lines 28-39, and lines 45-62; Col. 6 lines 1-9, and lines 22-27 (emphasis added).

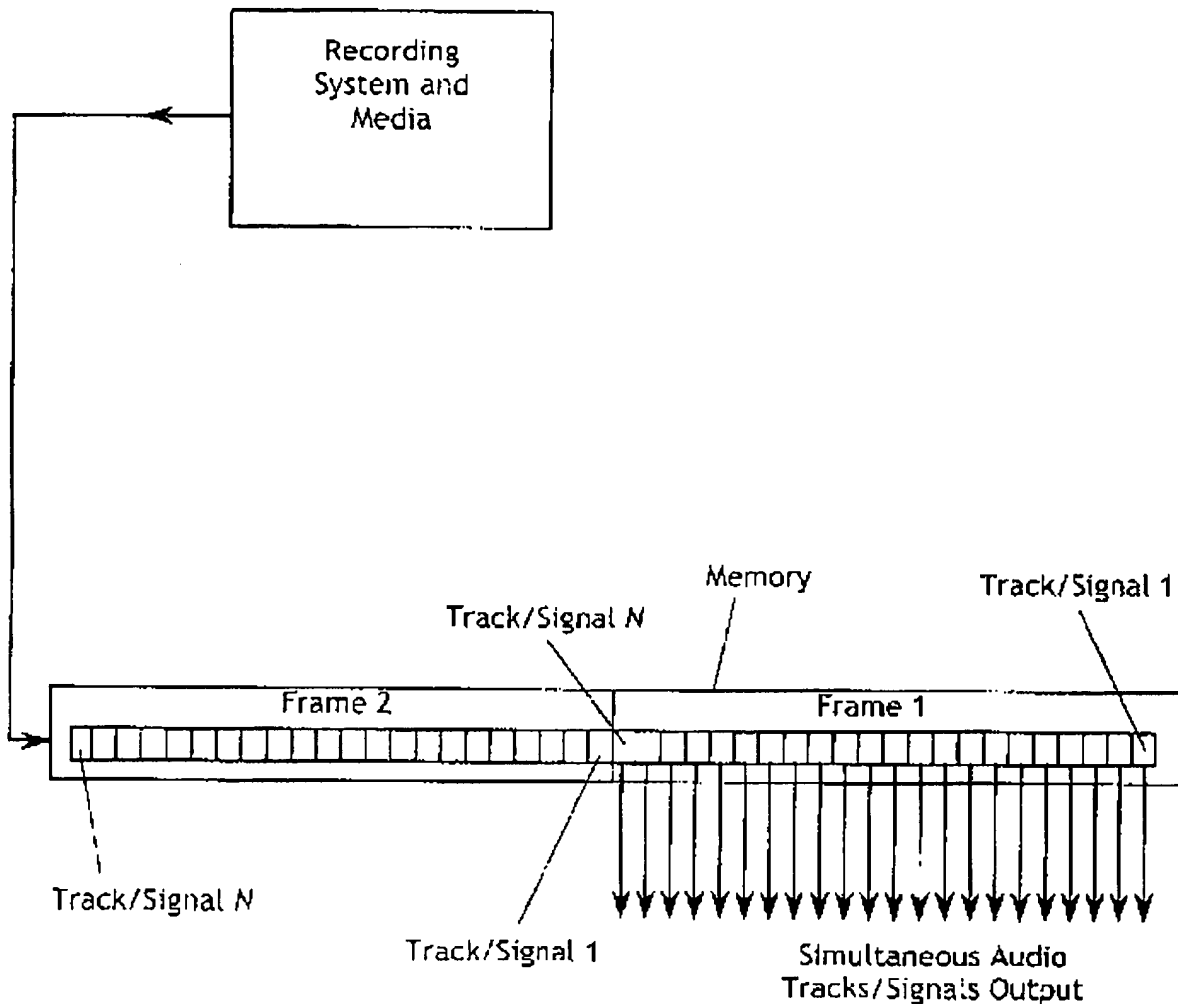


FIG. 2

With regard to FIG. 2, when it is desired to play back the N audio tracks simultaneously, the disk drive is directed to the time stamp location of composite data frame 1, which is read into a memory buffer, followed by frame 2, and the like reiteration. The buffer may comprise the same RAM that is used to assemble the frames initially, as described previously. Each composite data frame loaded into the buffer is disassembled into its separate component segments, and each segment is defined as an individual audio/video/data track or signal which can be sent to a respective output. The segments contained in each composite data frame can be streamed to their respective outputs at a data rate sufficient to permit continuous, uninterrupted playback of each track or signal, whereby all the

tracks/signals have the quality and continuity of multi-track, simultaneous playback. After a frame is disassembled and read out of the buffer, it is erased and replaced by the succeeding frame. The memory buffer may hold more than two frames, if necessary, to accomplish this task smoothly.

As an example for illustration only, a N track music recording may have a length of 30 seconds, and the length of each segment is set at 100 ms. These circumstances require 300 composite data frames to be constructed and recorded on the disk (30 seconds divided by 100 ms). The disk drive read/write head thus must undergo 300 seek routines to access and play back the 30 second music selection consisting of N audio tracks. The amount of memory buffering that would be needed in this case is generally twice the length of a single frame. This is calculated as twice the product of N audio tracks times 100 ms, which is 12.8 seconds for 64 audio tracks. Assuming an audio recording sampling rate of 50 KHz, and a general rule that 1 MB of RAM can store 10.46 seconds of monaural audio at this sample rate, the entire 30 second recording of all 64 tracks may be played back simultaneously in real time using two composite data frames in RAM at a time in 1.22 MB RAM. In contrast, prior art devices can require 12 MB RAM to buffer 64 audio tracks, and no more than 64 tracks can be buffered due to seek time limitations of the data disk read/write heads. Thus the invention provides a significant improvement in performance, in both the number of audio tracks provided simultaneously, and the far more efficient use of RAM.

See Detailed Description, Jaeger Col. 6 lines 50-68; and Col. 7 lines 1-24.

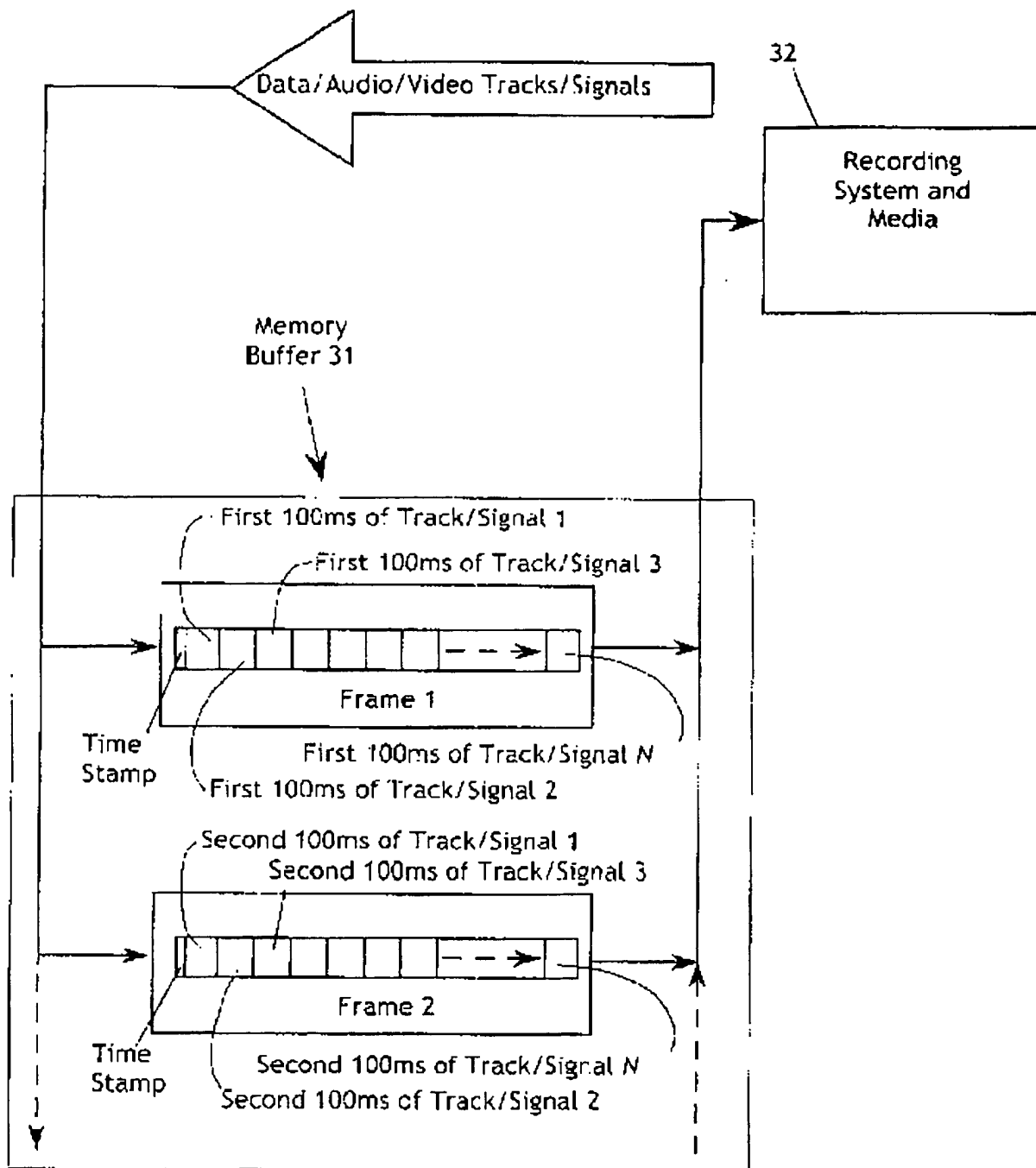


FIG. 5

The invention may be generalized as depicted in FIG. 5. A plurality of audio, video and/or data tracks/signals is acquired from any source, such as a recording system, data storage system, network resource, real-time sources, a computer bus or other data bus, internet data stream, live recording or the like. As stated previously, any reference to audio tracks, data tracks or video tracks is presumed

to include any and all audio signals, data signals, or video signals, or any combination thereof, whether or not they are specifically configured as tracks, and any reference to one is intended to encompass all

See Detailed Description, Jaeger Col. 8, lines 35-45.

IV. ARGUMENT: ART OF RECORD DOES NOT ESTABLISH *PRIMA FACIE* CASE OF UNPATENTABILITY

Examiner has stated “Claims 1-6,12-18, 21-31, 37-43, and 46-50 are rejected under U.S.C. 102(b) as being anticipated by Jaeger (U.S. Patent 6,345,028)” (“Jaeger” hereinafter); and “Claims 7-11,19-20, 32-36, and 44-45 are rejected under 35 U.S.C. 103(a) as being obvious over Jaeger in view of Ma et al. (U.S. Patent 5,926,649).” *Examiner’s Office Action*, pp. 5 and 14 (20 October 2006).

In response, Applicant respectfully asserts herein that, under the MPEP and legal standards for patentability as set forth below, the art of record does not establish a *prima facie* case of the unpatentability of Applicant’s claims at issue. Specifically, Applicant respectfully shows below that the art of record does not show or suggest the recitations of Applicant’s claims at issue, and hence fails to establish a *prima facie* case of unpatentability. Accordingly, Applicant respectfully requests that the Examiner withdraw his rejections and hold all claims to be allowable over the art of record.

A. MPEP Standards for Patentability¹

The MPEP states as follows: “the examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability. If that burden is met, the burden of coming forward with evidence or argument shifts to the applicant. . . . If examination at the initial stage does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of the patent.” *MPEP* § 2107 (citing *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992)); *In Re Glaug* *5 (Fed. Cir., 15

¹ Applicant is aware that Examiner is familiar with the MPEP standards. Applicant is merely setting forth the MPEP standards to serve as a framework for Applicant’s arguments following and to ensure a complete written record is established. Should Examiner disagree with Applicant’s characterization of the MPEP standards, Applicant respectfully requests correction.

March 2002) (Fed. Cir. BBS). (“During patent examination the PTO bears the initial burden of presenting a *prima facie* case of unpatentability. *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984). If the PTO fails to meet this burden, then the applicant is entitled to the patent.”). Accordingly, unless and until an examiner presents evidence establishing *prima facie* unpatentability, an applicant is entitled to a patent on all claims presented for examination.

1. MPEP Standards for Determining Anticipation

An examiner bears the initial burden of factually supporting any *prima facie* conclusion of anticipation. *In Re Skinner*, 2 U.S.P.Q.2d 1788, 1788-89 (B.P.A.I. 1986); *MPEP* § 2107 (citing *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992) (“[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability....”). Failure of an examiner to meet this burden entitles an applicant to a patent. *Id.* (“[i]f examination at the initial stage does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of the patent”).

The MPEP indicates that in order for an examiner to establish a *prima facie* case of anticipation of an applicant’s claim, the examiner must first interpret the claim,² and thereafter show that the cited prior art discloses the same elements, in the same arrangement, as the elements of the claim which the examiner asserts is anticipated. More specifically, the MPEP states that “[a] claim is anticipated *only if each and every element as set forth in the claim is found*, either expressly or inherently described, in a single prior art reference. . . . The identical invention must be shown in as complete detail as is contained in the . . . claim. . . . The elements must be arranged as required by the claim”). *MPEP* § 2131. Consequently, under the guidelines of the MPEP set forth above, if there is *any* substantial difference between the prior art cited by an examiner and an applicant’s claim which the examiner asserts is rendered obvious by the prior art, the prior art does NOT establish a *prima facie* case of anticipation and, barring other rejections, the applicant is entitled to a patent on such claim.

² With respect to interpreting a claim at issue, the MPEP directs that, during examination -- as opposed to subsequent to issue -- such claim be interpreted as broadly as the claim terms would reasonably allow, in light of the specification, when read by one skilled in the art with which the claimed invention is most closely connected. *MPEP* § 2111.

2. MPEP Standards for Determining Obviousness

“[T]he examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness.”³ *MPEP* § 2142. The MPEP indicates that in order for an examiner to establish a *prima facie* case that an invention, as defined by a claim at issue, is obvious, the examiner must (1) interpret the claim at issue; (2) define one or more prior art reference components relevant to the claim at issue; (3) ascertain the differences between the one or more prior art reference components and the elements of the claim at issue; and (4) adduce objective evidence which establishes, under a preponderance of the evidence standard, a teaching to modify the teachings of the prior art reference components such that the prior art reference components can be used to construct a device substantially equivalent to the claim at issue. This last step generally encompasses two sub-steps: (1) adducement of objective evidence teaching how to modify the prior art components to achieve the individual elements of the claim at issue; and (2) adducement of objective evidence teaching how to combine the modified individual components such that the claim at issue, as a whole, is achieved. *MPEP* § 2141; *MPEP* § 2143. Each of these forgoing elements is further defined within the MPEP. *Id.*

a) Interpreting a Claim at Issue

With respect to interpreting a claim at issue, the MPEP directs that, during examination -- as opposed to subsequent to issue -- such claim be interpreted as broadly as the claim terms would reasonably allow when read by one skilled in the art with which the claimed invention is most closely connected. In practice, this is achieved by giving each of the terms in the claim the “plain meaning” of the terms as such would be understood by those having ordinary skill in the art, and if portions of the claim have no “plain meaning” within the art, or are ambiguous as used in a claim, then the examiner is to consult the specification for clarification. *MPEP* § 2111.

³ An invention, as embodied in the claims, is rendered obvious if an examiner concludes that although the claimed invention is not identically disclosed or described in a reference, the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *MPEP* § 2141 (citing 35 U.S.C. § 103).

b) Definition of One or More Prior Art Reference Components Relevant to the Claim at Issue

Once the claim at issue has been properly interpreted, the next step is the definition of one or more prior art reference components (*e.g.*, electrical, mechanical, or other components set forth in a prior art reference) relevant to the properly interpreted claim at issue. With respect to the definition of one or more prior art reference components relevant to the claim at issue, the MPEP defines three proper sources of such prior art reference components, with the further requirement that each such source must have been extant at the time of invention to be considered relevant. These three sources are as follows: patents as defined by 35 U.S.C. § 102, printed publications as defined by 35 U.S.C. § 102, and information (*e.g.*, scientific principles) deemed to be “well known in the art”⁴ as defined under 35 U.S.C. § 102. *MPEP* § 2141.

c) Ascertainment of Differences between Prior Art Reference Components and Claim at Issue; Teaching to Modify and/or Combine Prior Art Reference Components to Remedy Those Differences in Order to Achieve Recitations of Claim at Issue

With one or more prior art components so defined and drawn from the proper prior art sources, the differences between the one or more prior art reference components and the elements of the claim at issue are to be ascertained. Thereafter, in order to establish a case of *prima facie* obviousness, an examiner must set forth a rationale, supported by objective evidence⁵ sufficient to demonstrate under a preponderance of the evidence standard, that in the prior art extant at the time of invention there was a teaching to modify and/or combine the one or more prior art reference components to construct a device practicably equivalent to the claim at issue.

⁴ The fact that information deemed to be “well known in the art” can serve as a proper source of prior art reference components seems to open the door to subjectivity, but such is not the case. As a remedy to this potential problem, *MPEP* § 2144.03 states that if an examiner asserts that his position is derived from and/or is supported by a teaching or suggestion that is alleged to have been “well known in the art,” and that if an applicant traverses such an assertion (that something was “well known within the art”), the examiner must cite a reference in support of his or her position. The same *MPEP* section also states that when a rejection is based on facts within the personal knowledge of an examiner, the data should be stated as specifically as possible, and the facts must be supported, when called for by the applicant, by an affidavit from the examiner. Such an affidavit is subject to contradiction or explanation by the affidavits of the applicant and other persons. *Id.* Thus, all sources of prior art reference components must be objectively verifiable.

⁵ The proper sources of the objective evidence supporting the rationale are the defined proper sources of prior art reference components, discussed above, with the addition of factually similar legal precedent. *MPEP* § 2144.

The preferable evidence relied upon is an express teaching to modify/combine within the properly defined objectively verifiable sources of prior art. In the absence of such express teaching, an examiner may attempt to establish a rationale to support a finding of such teaching reasoned from, or based upon, express teachings taken from the defined proper sources of such evidence (*i.e.*, properly defined objectively verifiable sources of prior art). *MPEP* § 2144; *In re Dembiczak*, 50 U.S.P.Q.2d 1614 (Fed. Cir. 1999).

The MPEP recognizes the pitfalls associated with the tendency to subconsciously use impermissible “hindsight” when an examiner attempts to establish such a rationale. The MPEP has set forth at least two rules to ensure against the likelihood of such impermissible use of hindsight. The first rule is that:

under 35 U.S.C. 103, the examiner must step backward in time and into the shoes worn by the hypothetical “person of ordinary skill in the art” when the invention was unknown and just before it was made. In view of all factual information,⁶ the examiner must then make a determination whether the claimed invention “as a whole” would have been obvious at that time to that person. Knowledge of an Applicant’s disclosure must be put aside in reaching this determination, yet kept in mind in order to determine the “differences,” conduct the search, and evaluate the “subject matter as a whole” of the invention. The tendency to resort to “hindsight” based upon an Applicant’s disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art.

MPEP § 2142 (emphasis added). Thus, if the only objective evidence of such teaching to modify and/or combine prior art reference components is an applicant’s disclosure, no evidence of such teaching exists.⁷

The second rule is that if an examiner attempts to rely on some advantage or expected beneficial result that would have been produced by a modification and/or combination of the prior art reference components as evidence to support a rationale to establish such teachings to

⁶ “Factual information” is information actually existing or occurring, as distinguished from mere supposition or opinion. *Black’s Law Dictionary* 532 (5th ed. 1979).

⁷ An applicant may argue that an examiner’s conclusion of obviousness is based on improper hindsight reasoning. However, “[a]ny judgment on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and does not include knowledge gleaned only from applicant’s disclosure, such a reconstruction is proper.” *MPEP* § 2145(X)(A) (emphasis added).

modify and/or combine prior art reference components, the MPEP requires that such advantage or expected beneficial result be objectively verifiable teachings present in the acceptable sources of prior art (or drawn from a convincing line of reasoning based on objectively verifiable established scientific principles or teachings). *MPEP* § 2144. Thus, as a guide to avoid the use of impermissible hindsight, these rules from the MPEP make clear that absent some objective evidence, sufficient to persuade under a preponderance of the evidence standard, no teaching of such modification and/or combination exists.⁸

B. Technical Material Cited by Examiner Does Not Show/Suggest Recitations of Independent Claim 1 and Dependent Claims 2-25 as Presented Herein; Notice of Allowance of Same Respectfully Requested

1. Independent Claim 1

Independent Claim 1 recites as follows: “A method comprising: [a] receiving a request for data having at least one specific content; [b] obtaining one or more temporal addresses

⁸ *In Re Sang Su Lee* 277 F.3d 1338 (Fed. Cir. 2002) (“When patentability turns on the question of obviousness, the search for and analysis of the prior art includes evidence relevant to the finding of whether there is a teaching, motivation, or suggestion to select and combine the references relied on as evidence of obviousness.”) *See, e.g., McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-52, 60 U.S.P.Q.2d 1001, 1008 (Fed. Cir. 2001) (“the central question is whether there is reason to combine [the] references,” a question of fact drawing on the *Graham* factors). “The factual inquiry whether to combine references must be thorough and searching.” *Id.* It must be based on objective evidence of record. This precedent has been reinforced in myriad decisions, and cannot be dispensed with. *See, e.g., Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1124-25, 56 U.S.P.Q.2d 1456, 1459 (Fed. Cir. 2000) (“a showing of a suggestion, teaching, or motivation to combine the prior art references is an ‘essential component of an obviousness holding’”) (quoting *C.R. Bard, Inc. v. M3 Systems, Inc.*, 157 F.3d 1340, 1352, 48 U.S.P.Q.2d 1225, 1232 (Fed. Cir. 1998)); *In re Dembiczak*, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999) (“Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.”); *In re Dance*, 160 F.3d 1339, 1343, 48 U.S.P.Q.2d 1635, 1637 (Fed. Cir. 1998) (there must be some motivation, suggestion, or teaching of the desirability of making the specific combination that was made by the applicant); *In re Fine*, 837 F.2d 1071, 1075, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988) (“teachings of references can be combined only if there is some suggestion or incentive to do so.”) (emphasis in original) (quoting *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984)). The need for specificity pervades this authority. *See, e.g., In re Kotzab*, 217 F.3d 1365, 1371, 55 U.S.P.Q.2d 1313, 1317 (Fed. Cir. 2000) (“particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed”); *In re Rouffet*, 149 F.3d 1350, 1359, 47 U.S.P.Q.2d 1453, 1457-58 (Fed. Cir. 1998) (“even when the level of skill in the art is high, the Board must identify specifically the principle, known to one of ordinary skill, that suggests the claimed combination. In other words, the Board must explain the reasons one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious.”)).

corresponding to the at least one specific content, in response to the request for data having the at least one specific content; and [c] selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses.”⁹ As shown following, the technical material cited by Examiner does not show at least clause [b] and clause [c] of Independent Claim 1, and thus Applicant respectfully requests that Examiner allow Independent Claim 1 for at least those reasons.

a) Technical Material Cited by Examiner Does not Show/Suggest Language of Clause [b] of Independent Claim 1

With respect to clause [b], Independent Claim 1 recites as follows: “A method comprising: [b] obtaining one or more temporal addresses corresponding to the at least one specific content, in response to the request for data having the at least one specific content....”

With respect to clause [b] of Independent Claim 1, Examiner has stated “[see Jaeger] (col. 5, lines 52-63; Fig. 1); *It should be noted that the "time stamps" are analogous to the "temporal addresses."* See Examiner’s Office Action, p. 5 (20 October 2006) (emphasis in original).

Applicant respectfully points out that Jaeger does not teach as suggested by Examiner. Rather, as set forth above, Jaeger recites:

Incremental temporal segments of each recorded audio track are read from the disk and assembled into a composite data frame in RAM, and the frame is recorded back onto a disk drive. Thus, for example, the first 100 ms of each audio track comprises the first incremental temporal segments, and all of these segments are recorded in a defined order in the first composite data frame. The second frame consists of the second 100 ms segments of the same audio tracks, which are recorded in the same order as in the first frame. This process is reiterated until the entire lengths of all of the audio tracks are re-ordered and recorded in such frames on the disk drive. ... The frames are placed on the disk in contiguous order, to the greatest extent possible, to minimize the seek time of the disk drive read/write heads. But because of physical writing limitations of disk drive architectures and/or requirements of disk drive operating systems, these frames may not always be capable of being written in contiguous order....

...

Each frame is labeled with a time stamp that encodes the ordered position of the

⁹ The lettering of the clauses herein is merely for sake of clarity of argument and should not be taken to imply any particular ordering of the clauses.

frame among all the composite data frames. The time stamp distinguishes the location of the starting point of each frame or sub-section on the disk drive data tracks. In addition, a registry of all the start times is created and stored in memory, as well as on backup storage media. The disk drive operating program is capable of reading the start time registry and directing the read/write head to the start of any frame, and also to read out the frames in an ordered manner.

See Summary, Jaeger Col. 2 lines 52-65; Col. 3 lines 29-38.

With regard to FIG. 1,

Thereafter, or simultaneously, the composite data frames are recorded onto a disk drive, indicated as reference numeral 11', which may be any disk drive or equivalent recording media. In either case, the frames are placed onto the disk 11' in as contiguous order as practically possible on disk tracks 12', as indicated in FIG. 1. The frames are recorded as contiguously as possible to minimize the seek time of the read/write head of the disk drive during read out, as described later....

At the same time, a registry of all the time stamps of all the frames is created and stored in RAM, and also on the disk 11 or 11', or other storage medium. The registry enables the disk drive operating program to direct the read/write head to the start of any frame, and also to read out the frames in a predetermined order.

See Detailed Description, Jaeger. Col. 5, line 1; Col. 6 lines 1-9, and lines 22-27.

As can be seen from the foregoing, the "time stamp" of Jaeger does not show or suggest the "temporal address" related recitations of clause [b] of Independent Claim 1. To the contrary, the "time stamp ... [of Jaeger] encodes the ordered position of the frame among all the composite data frames.... and distinguishes the location of the starting point of each frame or sub-section on the disk drive data tracks....[such that the] disk drive operating program is capable of ... directing the read/write head to the start of any frame, and also to read out the frames in an ordered manner." Accordingly, under the MPEP standards as set forth above, the art of record does not establish a *prima facie* case that Jaeger anticipates Independent Claim 1. Accordingly, Applicant respectfully asks Examiner to hold Independent Claim 1 allowable and to issue a Notice of Allowability of same.

**b) Technical Material Cited by Examiner Does not Show/Suggest
Language of Clause [c] of Independent Claim 1**

With respect to clause [c], Independent Claim 1 recites as follows: “A method comprising: ... [c] selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses.”

With respect to clause [c] of Independent Claim 1, Examiner has stated “[with respect to Jaeger] (col. 6, lines 49-63; Fig. 2). *It should be noted that the re-ordered audio/video/data tracks/signals being streamed from the RAM buffer are analogous to the "spatial-to-temporal translated data."* See Examiner’s Office Action, p. 5 (20 October 2006) (emphasis in original).

Applicant respectfully points out that Jaeger does not teach as suggested by Examiner. To see that this is true, Applicant sets forth the following portions of Jaeger that describe an example of what happens to a segment of data in Jaeger’s technology:

With regard to FIG. 1, a disk drive 11 is used initially to record a large plurality of audio tracks/signals ... on a first-available basis, whereby the audio tracks/signals may be placed on the disk 11 in a disordered manner.

To overcome this drawback in the playback process, the invention processes .. by re-ordering the audio data and recording new composite data frames onto a disk drive. First, incremental temporal segments of each recorded audio track are read from the disk 11 ... (e.g., track N)... In the example of FIG. 1, the first 100 ms segments of tracks 1-N are read in a predetermined order from the disk 11 and placed in a RAM buffer in the predetermined order, where they are assembled into composite data frame 1. Frame 1 is labeled with a time stamp which indicates the starting point of the frame and also the number of the frame. Likewise, the second 100 ms segments of tracks 1-N are then read from the disk drive 11 and placed in the RAM buffer as data frame 2, which is also labeled with its respective time stamp....

Thereafter, or simultaneously, the composite data frames are recorded onto a disk drive, indicated as reference numeral 11', the frames are placed onto the disk 11' in as contiguous order as practically possible to minimize the seek time of the read/write head of the disk drive during read out, as described later.

...

With regard to FIG. 2, when it is desired to play back the N audio tracks simultaneously, the disk drive is directed to the time stamp location of composite data frame 1, which is read into a memory buffer, followed by frame 2, and the like reiteration. The buffer may comprise the same RAM that is used to assemble

the frames initially, as described previously. Each composite data frame loaded into the buffer is disassembled into its separate component segments, and each segment is defined as an individual audio/video/data track or signal which can be sent to a respective output. The segments contained in each composite data frame can be streamed to their respective outputs at a data rate sufficient to permit continuous, uninterrupted playback of each track or signal, whereby all the tracks/signals have the quality and continuity of multi-track, simultaneous playback.

See Detailed Description, Jaeger Col. 5 lines 28-29, lines 34-36, lines 45-49, line 51, and lines 53-62; Col. 6 lines 1-5, lines 6-8, and lines 50-64 (emphasis added).

As can be seen from the foregoing, Jaeger does not show or suggest the “selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses” recitations of clause [c] of Independent Claim 1. To the contrary, Jaeger recites “[1] audio tracks/signals may be placed on the disk 11 [2] segments of [audio] tracks 1-N are read in a predetermined order from the disk 11 and placed in a RAM buffer in the predetermined order [3] thereafter, or simultaneously, the composite data frames are recorded onto a disk drive ... [4] when it is desired to play back the N audio tracks ..., the disk drive is directed to the time stamp location of composite data frame 1, which is read into a memory buffer [that] may comprise the same RAM that is used to assemble the frames initially, as described previously [and] [5] each composite data frame loaded into the buffer is disassembled into its separate component segments ... [that] can be streamed to their respective outputs at a data rate sufficient to permit continuous, uninterrupted playback of each track.”

See Detailed Description, Jaeger Col. 5 lines 35-36, and lines 54-56; Col. 6 lines 1-2, lines 50-55, and lines 57, 58, 61-63 (emphasis added).

Applicant points out that, as shown foregoing, at no point does Jaeger teach “spatial to temporal translated data.” Rather, as shown, Jaeger teaches “disk” to “RAM buffer” to “disk” to “RAM buffer” to “output,” and thus does not show or suggest the “spatial to temporal translated data” recitations of Independent Claim 1. Accordingly, under the MPEP standards as set forth above, the art of record does not establish a *prima facie* case that Jaeger anticipates Independent Claim 1. Accordingly, Applicant respectfully asks Examiner to hold Independent Claim 1 allowable and to issue a Notice of Allowability of same.

2. Dependent Claims 2-25 Patentable for at Least Reasons of Dependency from Independent Claim 1

Claims 2-25 depend either directly or indirectly from Independent Claim 1. "A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers." *See* 35 U.S.C. § 112 paragraph 4. Consequently, Dependent Claims 2-25 are patentable for at least the reasons why Independent Claim 1 is patentable. Accordingly, Applicant respectfully requests that Examiner hold Dependent Claims 2-25 patentable for at least the foregoing reasons, and issue a Notice of Allowance on same.

3. Dependent Claim 6 Independently Patentable

Notwithstanding its dependency from Independent Claim 1, Dependent Claim 6 is patentable on its own merits.

Dependent Claim 6 recites the "method of Claim 1, wherein said obtaining one or more temporal addresses corresponding to the at least one specific content, in response to the request for data having the at least one specific content further comprises: **associating the specific content with one or more times of one or more transmitted data portions.**" (emphasis added) With respect to Dependent Claim 6, Examiner has stated:

As per claim 6, Jaeger discloses obtaining one or more temporal addresses corresponding to the at least one specific content, in response to the request for data having the at least one specific content further comprises: associating the specific content with one or more times of one or more transmitted data portions (col. 5, lines 52-63; Fig. 1). *It should be noted that the "100 ms segments" are analogous to "one or more times."*

See Examiner's Office Action, p. 6 (20 October 2006)

Applicant respectfully points out that, with respect to Dependent Claim 6, Examiner inadvertently omitted reference to the "**associating ... specific content with times of ... transmitted data portions,**" and that when these recitations are taken into account it is yet more clear that the art does not show/suggest Dependent Claim 6. Applicant respectfully further

points out that, as set forth above and as reproduced here as a courtesy for examiner, the portion of Jaeger cited by Examiner recites

To overcome this drawback in the playback process, the invention processes the recorded audio tracks by re-ordering the audio data and recording new composite data frames onto a disk drive. First, incremental temporal segments of each recorded audio track are read from the disk 11 in a predetermined numerical order, e.g., starting with track 1 and ending with the last recorded track (e.g., track N). The temporal segments are all of the same short duration, such as 100 ms, although other durations may be used. In the example of FIG. 1, the first 100 ms segments of tracks 1-N are read in a predetermined order from the disk 11 and placed in a RAM buffer in the predetermined order, where they are assembled into composite data frame 1....

Thereafter, or simultaneously, the composite data frames are recorded onto a disk drive, indicated as reference numeral 11', which may be any disk drive or equivalent recording media....

See Detailed Description, Jaeger Col. 5 lines 45-57; and Col. 6 lines 1.4 (emphasis added).

Hence, as shown Jaeger recites “incremental temporal segments of each recorded audio track are read from the disk 11 in a predetermined numerical order the temporal segments are all of the same short duration ... and [are] placed in a RAM buffer in the predetermined order.” Hence, Jaeger does not show or suggest “associating the specific content with one or more times of one or more transmitted data portions” but rather recites “incremental temporal segments of each recorded audio track are read.” Accordingly, under the MPEP standards as set forth above, the art of record does not establish a *prima facie* case that Jaeger anticipates Dependent Claim 6. Accordingly, Applicant respectfully asks Examiner to hold Dependent Claim 6 allowable and to issue a Notice of Allowability of same.

Notwithstanding the foregoing, Applicant respectfully directs Examiner to MPEP § 2143.01, Suggestion or Motivation to Modify the References, which states as follows: “[i]f the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959) (... The court reversed the rejection holding the "suggested combination of references would

require a substantial reconstruction and redesign of the elements shown in [the primary reference] as well as a change in the basic principle under which the [primary reference] construction was designed to operate." 270 F.2d at 813, 123 USPQ at 352.)."

Applicant respectfully points out that even if Examiner were to point to teachings sufficient to show/suggest that Jaeger be modified to meet the recitations of Dependent Claim 6, substantial redesign and/or a change in the principle of operation would be required to render the so-modified technology of Jaeger fit for its intended purpose. As one example why this is true, Applicant respectfully points out that Jaeger states that one intended purpose of the technology of Jaeger is to provide the ability to "read out and play back a large plurality of tracks/signals simultaneously" and/or "play back the N audio tracks simultaneously." Hence, if Jaeger were modified such that its technology were to provide for "associating the specific content with one or more times of one or more transmitted data portions" as in Dependent Claim 6, instead of "incremental temporal segments of each recorded audio track are read" as recited in Jaeger, the ability of Jaeger to "read out and play back a large plurality of tracks/signals simultaneously" and/or "play back the N audio tracks simultaneously" would be lost and/or severely frustrated, and hence substantial reconstruction and/or redesign of the components shown in Jaeger as well as a change in the basic principle under which the Jaeger construction was designed to operate would be required. Accordingly, in light of the MPEP standards as set forth herein, insofar as that Jaeger would require substantial redesign and/or a change in its principle of operation to reach the recitations of Dependent Claim 6, not only does Jaeger not teach Dependent Claim 6, but as a matter of law there can be no such teaching. Accordingly, Applicant respectfully requests that Examiner hold Dependent Claim 6 allowable for at least the reasons set forth herein and issue a Notice of Allowance of same.

4. Dependent Claim 12 Independently Patentable

Notwithstanding its dependency from Dependent Claim 6, Dependent Claim 12 is patentable on its own merits.

Dependent Claim 12 recites the "method of Claim 6, wherein said associating the specific content with one or more times of one or more transmitted data portions further comprises: associating the specific content with at least one absolute time associated with a

clock.” (emphasis added). With respect to Dependent Claim 12, Examiner has stated: “As per claim 12, Jaeger discloses said associating the specific content with one or more times of one or more transmitted data portions further comprises: associating the specific content with at least one absolute time associated with a clock (col. 5, lines 52-54; Fig. 1). *It should be noted that “100 ms” is an absolute time.*” See Examiner’s Office Action p. 7 (20 October 2006) (emphasis in original).

Jaeger does not show or suggest the “associating the specific content with at least one absolute time associated with a clock” recitations of Dependent Claim 12. As explained above in relation to Dependent Claim 6, Jaeger recites “incremental temporal segments of each recorded audio track are read from the disk 11 temporal segments are all of the same short duration, such as 100 ms, although other durations may be used the *first 100 ms segments of tracks 1-N are read in a predetermined order* from the disk 11 and placed in a RAM buffer in the predetermined order.” Thus, since Jaeger recites “incremental ... temporal segments all of the same short duration, such as 100 ms ... are read in a predetermined order from the disk 11 and placed in a RAM buffer in the predetermined order” rather than the “associating the specific content with at least one absolute time associated with a clock” recitations of Dependent Claim 12, under the MPEP standards as set forth above, the art of record does not establish a *prima facie* case that Jaeger anticipates Dependent Claim 12. Accordingly, Applicant respectfully asks Examiner to hold Dependent Claim 12 allowable and to issue a Notice of Allowability of same.

5. Dependent Claims 13-14 Independently Patentable

Notwithstanding their dependencies from Dependent Claim 12, Dependent Claims 13-14 are patentable on their own merits.

The preambles of Dependent Claims 13-14 both recite the “method of Claim 12, wherein said associating the specific content with at least one absolute time associated with a clock further comprises...” while the bodies of Dependent Claims 13-14 respectively recite “associating the specific content with *at least one time associated with* at least one of an atomic clock, a global clock, a relative clock, a transmitted clock, and a number of ticks relative to

some specified received data” (Claim 13), “associating the specific content with at least one absolute time associated with a transmitted clock (Claim 14).” With respect to Claims 13-14, Examiner has stated

As per claim 13, Jaeger discloses said associating the specific content with at least one absolute time associated with a clock further comprises: associating the specific content with at least one time associated with at least one of an atomic clock, a global clock, a relative clock, a transmitted clock, and a number of ticks relative to some specified received data (col. 5, lines 52-54; Fig. 1). *See the citation note for claim 12 above.*

As per claim 14, Jaeger discloses said associating the specific content with at least one absolute time associated with a clock further comprises: associating the specific content with at least one absolute time associated with a transmitted clock (col. 5, lines 52-54; Fig. 1). *See the citation note for claim 12 above.*

See Examiner’s Office Action p. 7 (20 October 2006) (emphasis in original).

Applicant respectfully points out that it has reviewed the citation note for Claim 12 (as suggested by Examiner), and has not been able to find any of the recitations of either Claim 13 or 14 in the portion of Jaeger referenced by the note (see above discussion of Claim 12 for quoted portions related to the citation note of Examiner for Claim 12).¹⁰ That is, so far as Applicant can tell, Jaeger does not show or discuss any of the “an atomic clock, a global clock, a relative clock, a transmitted clock, and a number of ticks relative to some specified received data” and/or the “associating the specific content with at least one absolute time associated with a transmitted clock” related recitations of Claims 13 and 14, respectively. Accordingly, under the MPEP standards as set forth above, the art of record does not establish a *prima facie* case that Jaeger anticipates Dependent Claims 13-14. Accordingly, Applicant respectfully asks Examiner to hold Dependent Claims 13-14 allowable and to issue a Notice of Allowability of same.

¹⁰ Should Examiner disagree with Applicant on this point, Applicant respectfully requests a courtesy call to discuss this point.

C. Technical Material Cited by Examiner Does Not Show Recitations of Independent Claim 26 and Dependent Claims 27-50 as Presented Herein; Notice of Allowance of Same Respectfully Requested

Independent Claim 26 and Dependent Claims 27-50 are respective “means for” versions of Independent Claim 1 and Dependent Claims 2-25. Consequently, Applicant respectfully suggests that the art of record does not establish a *prima facie* case of the unpatentability of Independent Claim 26 and Dependent Claims 27-50 for reasons analogous to those why such art does not establish a *prima facie* case of unpatentability of Independent Claim 1 and Dependent Claims 2-25 (e.g., since the functions of Independent Claim 25 are similar to the operations of Independent Claim 25, Examiner has not established a *prima facie* case that the functions of Independent Claim 26 are taught in the art). Hence, Independent Claim 26 and Dependent Claims 27-50 are patentable for at least the reasons why Independent Claim 1 and Dependent Claims 2-25 are patentable. Accordingly, Applicant respectfully requests that Examiner hold Independent Claim 26 and Dependent Claims 2-25 patentable for at least the reasons as set forth related to Independent Claim 1 and Dependent Claims 2-25, and to thus issue a Notice of Allowability of same.

V. CONCLUSION


As explained herein, Applicant does not consider the art of record to render the pending claims unpatentable. Insofar as that the Applicant has herein argued the pending claims patentable, Applicant may not have herein explicitly addressed all the rejections and/or statements in Examiner's Office Action. The fact that the rejections and/or statements are not herein explicitly addressed should NOT be taken as an admission of any sort, and Applicant hereby reserves any and all rights to contest such rejections and/or statements at a later time. Specifically, no waiver (legal, factual, or otherwise), implicit or explicit, is hereby intended (e.g., with respect to any facts of which Examiner took Official Notice, and/or for which Examiner has supplied no objective showing, Applicant hereby contests those facts and requests express documentary proof of such facts at such time at which such facts may become relevant).

As shown above, the portions of the technical material cited by Examiner do not match the recitations of Applicant's herein-presented claims. Consequently, Applicant respectfully requests that Examiner issue a Notice of Allowance on all pending claims for at least the reasons set forth herein.

If the undersigned attorney has overlooked a relevant teaching in any of the references, the Examiner is requested to point out specifically where such teaching may be found. Furthermore, although not expressly set forth herein, Applicant continues to assert all points of any previous Office Action, and no waiver (legal, factual, or otherwise), implicit or explicit, is hereby intended.

The Examiner is encouraged to contact the undersigned by telephone at (425) 467-2260 to discuss the above and any other distinctions between the claims and the applied references, if desired. Also, if the Examiner notes any informalities in the claims, he is encouraged to contact the undersigned to expediently correct such informalities.

Respectfully submitted,



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